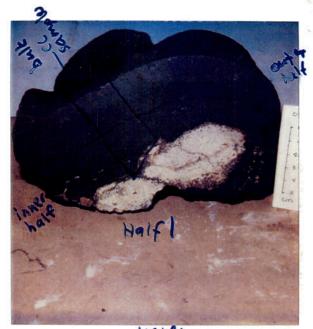
AMPLE ID	Mn CHEM	Mn CHEM Pt & Au	REE	Si Chem	P.Sect.	35mm Pho	Archive	Paleo					
CD23-1	7												
23-2	Bulk												
23-A1									Sample	from A	Vict Bac	, J	
						1							
					SSSMUU (S)								

Sample Description

Cruise L.D: F7-86 HW Sample I.D: St Size: Weight: 4.8 /5	a:25-0023-1	Location: S. Johnston
Mn crust thickness:	. T	
Inner: min: 17 max: 6.5 ave: 5.3 Inner: min: 17 max: 3.2 ave: 2.3		
Outer (desdiction) crust: min: 2.0 max: 3.5 ave: 2.8		
Surface texture: Smooth wy voids 7 Baty sid	0	
Internal structure:		
layered: X 2 + laminated: X in we half tables; storag massive: X in new half towlers here so porous: dendritic: X ocate half other:		Halt
Mineralogy (XRD) : I nav Last of court of massive	CD 23-1	
and help he are a process and also anchated outs help he are agence. Associated alteration, phosphorite, or hydrothermal deposits:	F7-86-HW	
Inner half of crust v. massive. Outer half slightly porous (some think orange layers) and dendrites. Inner v. massive part also laminated outer half has ~ 5 layers	Analyses and subsample analysis:	analyst:
Substratum:	CD23-1A bulk (0-50) (45-52) CC (45.19); XRD
Rock type: Hyaloclastile	2:	_
Description: yellowish beautoment of ting		
		_
Mineralogy(XRD):		



F7-86-HW from this recu

Sample Description

22×22×/0	Sta: 25 CD 23-2	Location: S Johnston I
Size: Weight: 4 kg		Pinge
Mm crust thickness:		920 100 1991
Total: min: 10 max: 35mm ave: 2.5 mm	A. A. Section	
Inner: min: max: ave:		
Outer	8 83	
crust: min: max: ave:	100	NATURE IN
Surface texture: modified Botryoids		
Internal structure:		
layered:laminated:	化 国家 第48	
massive:		
porous:		
dendritic: other:		
other:	11-11-11	
Mineralogy (XRD):		
		,
Associated alteration, phosphorite, or hydrothermal deposits:	CD23-2	
	Analyses and subsamp	les:
	analysis:	analyst:
	AVERAGE AND THE AVERAGE AND TH	analyst:
Substratum:	analysis:	analyst:
Substratum: Rock type: Volcanic Breccia (typical substrate for this dredge)	analysis: CO23-2 Bulk	analyst:
Substratum: Rock type: Volcanic Breccia (typical substrate for this dredge)	analysis: CO23-2 Bulk	analyst:
Substratum: Rock type: Volcanic Breccia (typical substrate for this dredge)	analysis: CO23-2 Bolk	analyst:
Substratum: Rock type: Volcanic Breccia (typical substrate for this dredge) Description: Alta of the Coment. Voicis between the coment of th	analysis: CO23-2 Bolk	analyst:
Substratum: Rock type: Volcanic Breccia (typical substrate for this dredge) Description: Altacal lance Rain Shock with Thosphoris dement. Voids between	analysis: CO23-2 Bolk	analyst:
Substratum: Rock type: Volcanic Breccia (typical substrate for this dredge) Description: Altach land Resident Voicisbetuce Classe with phosphoris dement. Voicisbetuce Classe of this in tilled, black are to consider the class of this in tilled, black are to consider the class of the class	analysis: CO23-2 Bolk	analyst:
Substratum: Rock type: (typical substrate for this dredge) Description: Alta of the dement. Voicis between class along stateface is a Mn Crust Clast. Altered volc. Rx. Frags. with phosphorite cement. Voids between clasts not totally in filled; lots of pole space. one clast	analysis: CO23-2 Bolk	analyst:
Substratum: Rock type: Volcanic Breccia (typical substrate for this dredge) Description: Alta of the Coment. Voicis between the Classes along Stateface is a Min Crust Class. Altered volc. Rx. Frags. with phosphorite cement. Voids	analysis: CO23-2 Bolk	analyst:
Substratum: Rock type: (typical substrate for this dredge) Description: Alta of the dement. Voicis between class along stateface is a Mn Crust Clast. Altered volc. Rx. Frags. with phosphorite cement. Voids between clasts not totally in filled; lots of pole space. one clast	Alice has a basalt from this dredge	analyst: 27 mm 369a
Substratum: Rock type: (typical substrate for this dredge) Description: Alface is a Machanic Class along State face is a Machanic Class along State face is a Machanic Class between clasts not totally in filled; lots of pole space. one clast along stabface is a MN crust clast.	Alice has a basalt from this dredge w/ □	analyst: 27 mm 369a
Substratum: Rock type: (typical substrate for this dredge) Description: Alta of the dement. Voicis between class along stateface is a Mn Crust Clast. Altered volc. Rx. Frags. with phosphorite cement. Voids between clasts not totally in filled; lots of pole space. one clast	Alice has a basalt from this dredge w/ □ nice crust for	analyst: de 27 mm 36 ga
Substratum: Rock type: (typical substrate for this dredge) Description: Alface is a Machanic Class along State face is a Machanic Class along State face is a Machanic Class between clasts not totally in filled; lots of pole space. one clast along stabface is a MN crust clast.	Alice has a basalt from this dredge w/ nice crust for chem- Got from Alice, Jim	analyst: 27 mm 36000 2021 2021 Lis 4023-Al. Aboutled not
Substratum: Rock type: (typical substrate for this dredge) Description: Alface is a Machanic Class along State face is a Machanic Class along State face is a Machanic Class between clasts not totally in filled; lots of pole space. one clast along stabface is a MN crust clast.	Alice has a basalt from this dredge w/ □ nice crust for	analyst: 27 mm 36000 2021 2021 Lis 4023-Al. Aboutled not
Substratum: Rock type: (typical substrate for this dredge) Description: Alface is a Machanic Class along State face is a Machanic Class along State face is a Machanic Class between clasts not totally in filled; lots of pole space. one clast along stabface is a MN crust clast.	Alice has a basalt from this dredge w/ nice crust for chem- Got from Alice, Jim	analyst: 27 mm 36000 2021 2021 Lis 4023-Al. Aboutled not



CD23-2

This rock from Alice

SAMPLE DESCRIPTION

Cruise Id:	F7-86-	HW	_ Size: 17 × 13 ×	/C Locatio	on: S. Johnston	I. Ridge
Sample Id:	CDD3-A1	River Aller	Weight: 2 kg	approx. ao Depth	on: S. Johnston:	
Mn Crust Surface Te	Description	smooth on	1 top	Alice formand (corner for T. S)		
to smao	their bother in	1 Gran	ulai on bottom			
Ma Count	res sides Gran Phickness: (cm	nutarysmi	nothing back	_		
Min: 1.	Max:	2.8	Ave: 2.4			
	ter to Inner):					
Min	Max	Ave	Texture	2		
1						
2					piac	Piece
2		+	+	_		
3		 				
4					-	
5						
		1				
6					C323-A1	This rock from Alia
	and XRD Mine				F7-86-HW	
one lay	or, massim	es will ord	one Front La.	ANALYSES	-	Photol
1	4 1 11	1 1	7			
discount	noted through	shout.	ege Ferosides	Subsample & Ty	ype Analysis	Weight
dinden	sound through	shout.		Thin sarti	ow of basalt o	Weight
himmen	nated through	shoul.		Thin sarti	ow of basalt o	Weight
hindmi	noted through	shoul,		Thin sarti	ow of basalt o	Weight
hindmi	noted through	shoul,		Thin sarti	ow of basalt o	Weight
		shoul,		Thin sarti	ow of basalt o	Weight
	Description			Thin sarti	ow of basalt o	Weight
Substrate	Description			Thin sarti	ow of basalt o	Weight
Substrate	Description Basal			Thin sarti	ow of basalt o	Weight
Substrate Rock Type: Description:	Description Basal		hosplate (?)	Thin sarti	ow of basalt o	Weight
Substrate Rock Type: Description: Gray 1	Description Basal casalt wy fracture.	t white pressicles	Losphale (2)	Thin sarti	ow of basalt o	Weight
Substrate Rock Type: Description: Gray 1 1:11: Ng Deacas	Description Basal Casalf w/ Fractures. 1	white vessicles	hosphate (?) Uny nearly.	Thin sarti	ow of basalt o	Weight
Substrate Rock Type: Description: Gray 1 Lilling Deacase W/ Mm,	Description Basal casalt wy fracture.	vessicles was noted	hosphate (?) Uny nearly.	Thin sarti	ow of basalt o	Weight
Substrate Rock Type: Description: Gray 1 Lilling Deacase W/ Mm,	Description Basal basalt wy fractures. I	vessicles was noted	hosphate (?) Uny nearly.	Thin sarti	ow of basalt o	Weight
Substrate Rock Type: Description: Gray 1 Lilling Deacase W/ Mm,	Description Basal basalt wy fractures. I	vessicles was noted	hosphate (?) Uny nearly.	Thin sarti	ow of basalt o	Weight
Substrate Rock Type: Description: Gray 1 Lilling Deacase W/ Mm,	Description Basal basalt wy fractures. I	vessicles was noted	hosphate (?) Uny nearly.	Thin sarti	ow of basalt o	Weight
Substrate Rock Type: Description: Gray 1 Lilling Deacase W/ Mm,	Description Basal basalt wy fractures. I	vessicles was noted	hosphate (?) Uny nearly.	Thin sarti	ow of basalt o	Weight

Described By: Lisa Game Subsampled By: All Go Down

This rock from Alice



CD 23-A1 F7-86-HW Photo 2

of piece 1 as pictured in photo 1